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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,238	10/03/2003	Kurt Businger	12406/73	1998

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EXAMINER	
OSELE, MARK A	

ART UNIT	PAPER NUMBER
1734	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/678,238	**Applicant(s)** BUSINGER ET AL.	
	Examiner Mark A Osele	**Art Unit** 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2004*.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-40* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7, 9-31, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuwa et al. in view of Thibault and Ohtsuki et al. Fuwa et al. shows the method and apparatus for removing a front panel from a cathode ray tube (crt) comprising a heating means, 6, for heating the adhesive between the front panel and the crt and a lifting instrument, 7, to be placed between the front panel and crt to separate them by force at the weakened adhesive layer.

Thibault shows a device for heating an article with a curved surface comprising a concave cradle, 2, a heating layer, 11, on top of the cradle, and an insulating layer, 7, conforming to the shape of the outside of the article to be heated and located between the heating layer and the article to be heated.

Ohtsuki et al. teaches that any known heating means including infrared radiation or conductive heating can be used to activate a thermal adhesive between two objects (column 6, line 66 to column 7, line 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cradle of Thibault in the invention of Fuwa et al. because Thibault teaches that this system can provide a controlled temperature to the entire surface of an article and can be manufactured to the shape of any desired article (column 4, lines 1-9) and because Ohtsuki et al. teaches that infrared and conductive heating are interchangeable for activating thermal adhesives in a laminate.

Regarding claims 5-7, Thibault shows a temperature controller including a thermocouple, 9, in the heating layer (column 3, lines 11-18).

Regarding claim 9, Thibault shows the cradle to be glass wool or other thermal insulating material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the cradle plastic because modern plastics are well known to be inexpensive, lightweight, insulating materials.

Regarding claims 19-20, Fuwa et al. teaches that the remnant adhesive can be removed by ultrasonic rinsing or scraping with a spatula or steel wool.

Regarding claims 22 and 23, absent a showing of unexpected results, heating times and temperatures would be obvious upon routine optimization for particular adhesives being loosened.

Regarding claim 24, temperature controllers using probes which contact the article being heated rather than the heating layer are well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a probe to the front panel of the combination of references to ensure that the article has reached the desired temperature for loosening the adhesive and eventual separation of the panel from the crt.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuwa et al. in view of Thibault and Ohtsuki et al. as applied to claim 1 above, and further in view of Tipton. The references as combined fail to show the heating layer to comprise silicone. Tipton teaches that silicone heaters are advantageous for heating concave surfaces in which articles to be heated are placed because the low mass of silicone heaters heats up and cools down quickly (column 3, line 59 to column 4, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a silicone heater in the invention of the references as combined because Tipton shows them to be advantageous for this shape.

4. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuwa et al. in view of Thibault and Ohtsuki et al. as applied to claim 1 above, and further in view Abbott et al. Abbott et al. teaches the use of shaped heaters conformed to the shape of the article to be heated (paragraphs 0012, 0013, and 0031) and further teaches that these heaters can be attached to the article by any known standard means (paragraph 0061). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any connect to use tape to adhere the heater to the monitor because this is a standard connector for holding parts together which Abbott et al. teaches to be within the purview of one of ordinary skill. Furthermore by using non-adhesive connectors to keep the heater in proximity to the monitor, any orientation would be practical as gravity would not be a factor in keeping the heater and the article together.

Response to Arguments

5. Applicant's arguments filed November 1, 2004 have been fully considered but they are not persuasive. Applicants' arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicants state the apparatus of Fuwa I unsuitable for removing a touch screen from a monitor because the monitor may be destroyed. Applicants allege that this is due to "substantial structural and mechanical differences between the touch screen and the safety panel." It is notable that applicants only state that the invention of Fuwa "may destroy the monitor." There is no indication that the invention of Fuwa would destroy the monitor. Furthermore, applicants have not explained what the structural and mechanical differences are nor what elements in Fuwa may destroy a monitor. Because there is no clear explanation of why the invention of Fuwa would be detrimental when used for removing touch screens, this argument is not persuasive.

Regarding applicants' argument that the heating disclosed by Ohtsuki et al. is for activating an adhesive and not softening it for removal, it is pointed out that thermoplastic adhesives are readily activated or softened using heat. One of ordinary skill in the art would understand that the same heating mechanism can be used to either activate an adhesive for lamination or soften an adhesive for delamination.

In response to applicant's argument that Thibault and Ohtsuki et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, applicants classify the field of endeavor as the repair of monitors with touch screens and the problem to be solved of removing a touch screen from a monitor. According to applicants' classification, the field of endeavor and the problem to be solved are essentially the same. If the Federal Circuit had intended the field of endeavor and the problem to be solved to be essentially the same, there would have been no need for a two prong test . The examiner agrees with applicants' description of the field of endeavor but the problems to be solved include uniform heating of a curved surface and heating an adhesive between layers of a laminate. Using this more accurate description of the problems to be solved by the inventor, the references to Thibault and Ohtsuki et al. are clearly analogous.

Regarding applicants' argument that the heating element of the references as combined should not touch the panel to prevent smudging, it would have been within the purview of one of ordinary skill in the art to use a heating element which contacts the panel when smudging is not important such as when there is no intention to reuse the panel. In this instance, the advantages of uniform heating taught by Thibault would be more important than preventing smudges. Furthermore, Thibault teaches that the "sheet of insulating fabric may be positioned between the plate and heat recipient" thereby indicating that the insulating fabric is optional.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., error free temperature regulation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims only require the placement of the thermocouple in a defined location, not that there is any accuracy to the temperature control, which applicants are arguing defines the instant invention over the prior art.

Applicants dispute the examiner's contention that plastics are lightweight, inexpensive insulating materials. As requested, the examiner points to Sakakibara (paragraph 0020) and Krug et al. (column 1, lines 48-51) as evidence.

Applicants also dispute the examiner's contention that temperature probes contact an article being heated are well known. As requested, the examiner points to Gentry et al. (abstract) as evidence.

Regarding claim 20, ultrasonic rinsing would generally result in chemical dissolving of the remaining adhesive. Even if the ultrasonic rinsing was shown to be a purely mechanical process, chemical dissolving is a well known alternative for removing remnant adhesive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). One of ordinary skill in the art would have considered all of the known information about heaters when deciding which is most effective and efficient for the process of heating the monitor for disassembly.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A Osele whose telephone number is 571-272-1235. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARK A. OSELE
PRIMARY EXAMINER

January 23, 2005